

Amendments to the Claims

Please amend Claims 1-20 to read as follows:

1. (Currently Amended) A method for discriminating recording medium for discriminating the kind thereof, comprising the steps of:
 - generating image information containing information corresponding to each of plural pixels included in a specific area on the surface of a recording medium as image information indicating the surface condition of ~~said~~ the recording medium;
 - obtaining a first parameter regarding the surface roughness of ~~said~~ the recording medium from ~~said~~ the image information;
 - obtaining a second parameter regarding the surface configuration of ~~said~~ the recording medium from ~~said~~ the image information; and
 - discriminating the kind of ~~said~~ the recording medium on the basis of ~~said~~ the first parameter and ~~said~~ the second parameter.

2. (Currently Amended) A method for discriminating recording medium according to Claim 1, wherein ~~said~~ the image information contains ~~the~~ brightness information of each of ~~said~~ the plural pixels, and ~~said~~ the first parameter is obtainable from ~~said~~ the brightness information, and relates to the magnitude of unevenness on the surface of ~~said~~ the recording medium.

3. (Currently Amended) A method for discriminating recording medium according to Claim 1, wherein ~~said~~ the image information contains ~~the~~ brightness information of each of ~~said~~ the plural pixels, and ~~said~~ the second parameter is obtainable corresponding to the changes in ~~said~~ the brightness information along the arrangement of ~~said~~ the plural continuous pixels, and relates to the cycle of unevenness on the surface of ~~said~~ the recording medium.

4. (Currently Amended) A method for discriminating recording medium for discriminating the kind thereof, comprising the steps of:

generating image information composed by plural pixels corresponding to a specific area on the surface of a recording medium, and containing ~~the~~ brightness information corresponding to each of ~~said~~ the plural pixels as image information indicating ~~the~~ a surface condition of ~~said~~ the recording medium;

obtaining a first parameter by statistical process in accordance with ~~said~~ the brightness information;

obtaining a second parameter regarding changes in ~~said~~ the brightness information along ~~the~~ an arrangement of ~~said~~ the plural continuous pixels; and

discriminating the kind of ~~said~~ the recording medium on the basis of ~~said~~ the first parameter and ~~said~~ the second parameter.

5. (Currently Amended) A method for discriminating recording medium according to Claim 4, wherein ~~said~~ the first parameter is either one of ~~the~~ a brightness difference between the maximum value and the minimum value of ~~said~~ the brightness information, the mean value of ~~said~~ the brightness information, and the brightness at the peak of a histogram prepared from ~~said~~ the plural pixels.

6. (Currently Amended) A method for discriminating recording medium according to Claim 5, wherein ~~said~~ the mean value of the brightness information is either the arithmetic mean value of the maximum value and the minimum value of ~~said~~ the brightness information or the arithmetic mean value of the respective brightness information of ~~said~~ the plural pixels.

7. (Currently Amended) A method for discriminating recording medium according to Claim 4, wherein ~~said~~ the second parameter is obtainable on the basis of ~~the~~ binary data prepared by binarizing ~~said~~ the image information, being either one of the number of inversions of the values of adjacent pixels in ~~said~~ the binary data, the run-length coded amount at the time of allocating codes to ~~said~~ the binary data in accordance with the run-length coding, and the number of isolated pixels discriminated as isolated pixels on the basis of the values of adjacent pixels on both sides in accordance with ~~said~~ the binary data.

8. (Currently Amended) A method for discriminating recording medium according to Claim 7, wherein a threshold value used for ~~said~~ the binarizing process is either the mean value of ~~said~~ the brightness information or the brightness at the peak of ~~the~~ a histogram prepared from ~~said~~ the plural pixels.

9. (Currently Amended) A method for discriminating recording medium according to Claim 4, wherein ~~said~~ the second parameter is ~~the~~ a number of changes of plus/minus signs of adjacent pixels.

10. (Currently Amended) A method for discriminating recording medium according to Claim 4, wherein ~~said~~ the discriminating process discriminates the kind of ~~said~~ the recording medium by use of a table in which ~~said~~ the first and second parameters and the kind of ~~said~~ the recording medium are correlated.

11. (Currently Amended) A method for discriminating recording medium according to Claim 4, wherein ~~said~~ the discriminating process discriminates the kind of ~~said~~ the recording medium on the basis of plural threshold values corresponding to ~~said~~ the first parameter and ~~said~~ the second parameter, respectively.

12. (Currently Amended) A method for discriminating recording medium according to Claim 11, wherein ~~said~~ the plural threshold values are values determined on the basis of the distributions ~~said~~ the first parameter and ~~said~~ the second parameter can exhibit per kind of ~~said~~ the recording medium.

13. (Currently Amended) A method for discriminating recording medium according to Claim 4, wherein a plain sheet and a coated sheet are discriminated on the basis of ~~said~~ the first parameter and ~~said~~ the second parameter.

14. (Currently Amended) A method for discriminating recording medium according to Claim 13, the threshold value of ~~said~~ the second parameter for discriminating a glossy film and a glossy sheet is ~~larger~~ greater than the threshold value of ~~said~~ the second parameter for ~~discriminated~~ discriminating the glossy sheet and ~~said~~ the coated sheet.

15. (Currently Amended) A method for discriminating recording medium according to Claim 4, wherein ~~said~~ the step of generating the image information obtains ~~said~~ the image information by picking up an image regarding a specific area on ~~said~~ the recording medium.

16. (Currently Amended) A method for discriminating recording medium according to Claim 4, wherein ~~said~~ the image information is either one-dimensional image information or two-dimensional image information.

17. (Currently Amended) A method for discriminating recording medium according to Claim 16, wherein if ~~said~~ the image information generated is a two-dimensional image information, said step of generating the image information converts it into one-dimensional image information.

18. (Currently Amended) A method for discriminating recording medium for discriminating the kind thereof, comprising the steps of:

generating ~~the~~ image information composed by plural pixels corresponding to a specific area on the surface of a recording medium as image information indicating ~~the~~ a surface condition of ~~said~~ the recording medium;

obtaining as a parameter the number of pixels at peak brightness in ~~the~~ a histogram prepared by ~~said~~ the plural pixels; and

discriminating the kind of recording medium on the basis of ~~said~~ the parameter.

19. (Currently Amended) A method for discriminating recording medium according to Claim 18, further comprising the step of obtaining a second parameter related to the magnitude

of the unevenness on the surface of ~~said~~ the recording medium from the brightness information of each of ~~said~~ the plural pixels, wherein ~~said~~ the discriminating step discriminates the kind of recording medium on the basis of ~~said~~ the parameter and the second parameter related to the magnitude of the unevenness of the surface of ~~said~~ the recording medium.

20. (Currently Amended) A recording apparatus for recording on a recording medium conveyed by conveying means in accordance with recording data, comprising:

image information-generating means for generating image information composed by plural pixels corresponding to a specific area on the surface of the recording medium, and containing ~~the~~ brightness information of each of ~~said~~ the plural pixels as the image information indicating ~~the~~ a surface condition of ~~said~~ the recording medium conveyed by ~~said~~ the conveying means; and

discriminating means for discriminating the kind of ~~said~~ the recording medium in accordance with a first parameter obtainable by statistical process on the basis of ~~said~~ the brightness information, and a second parameter obtainable with respect to ~~the~~ changes in ~~said~~ the brightness information along ~~the~~ an arrangement of ~~said~~ the plural continuous pixels.